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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,854	09/30/2005	Zenon Lysenko	63104A	6166
109 7590 01/31/2008 The Dow Chemical Company Intellectual Property Section P.O. Box 1967 Midland, MI 48641-1967			EXAMINER CUTLIFF, YATE KAI RENE	
			ART UNIT	PAPER NUMBER
			1621	
			MAIL DATE	DELIVERY MODE
			01/31/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/551,854	LYSENKO ET AL.	
	Examiner	Art Unit	
	Yate' K. Cutliff	1621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 18-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Specification***

1. The disclosure is objected to because of the following informalities: On page 18 at line 26 there is a blank space after "Serial No." and before "(Attorney's".

Appropriate correction is required.

***Response to Arguments - 35 U.S.C. 103***

1. Applicant's arguments, see Amendment, filed November 26, 2007, with respect to the rejection(s) of claim(s) 18-24 under 35 U.S.C. 103(a) as being unpatentable over of Early et al. (U.S. 3,674,718), and in view of Voss et al. (U.S. 4,189,515) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Frankel, E. (U.S. 3,787,459), Abatjoglou et al. (U.S. 4,731,486) and Bahrmann et al. (CA2,162,083), as set forth below.

2. Applicant's arguments concerning the rejection of claims 26-34 filed November 26, 2007 have been fully considered but they are not persuasive. Even with Examiner's withdrawal of Early et al. as a reference in this instance, in light of the combinations of the remaining cited references the claimed process would have been obvious to one of ordinary skill at the time of Applicant's invention.

It is noted that claim 26 was amended to teach that the conversion is about 80 and less than 99 percent. This amendment is not found persuasive because Abatjoglou discloses aldehyde selectivity, with the amount and type of aldehyde mixture ultimately determining the final alcohol produced by hydrogenation.

3. Applicant's arguments, filed November 26, 2007, with respect to the rejection(s) of claim(s) 18 and 25 under 35 USC 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn with regards to reference of Early et al and Voss et al. However, the rejection is maintained in view of Frankel, E. (U.S. 3,787,459), Abatjoglou et al. (U.S. 4,731,486) and Bahrmann et al. (CA2,162,083).

Applicant is directed to the discussion below in paragraph 5.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 18-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frankel, E. (U.S. 3,787,459), Abatjoglou et al. (U.S. 4,731,486) and Bahrmann et al. (CA2,162,083).

Applicant is directed the discussion of the references set out in the office action of September 26, 2007. Specifically, Applicant is directed to the following facts: 1) Frankel et al teaches a process for hydroformylation of monounsaturated fatty acid/esters compounds from a safflower oil into aldehyde using a highly selective hydroformylation catalyst system that uses rhodium. (see column 2, lines 21 - 25); 2) Abatjoglou et al. uses a monosulfonated tertiary phosphine metal salt ligand in a nonaqueous Group VII transition metal-phosphorous complex catalyst in a

hydroformylation reaction that produces aldehyde (formyl), and states that varying the metal cation group of the ligand, adjusting the carbon monoxide partial pressure and/or phosphine ligand concentration in the hydroformylation reaction allows targeted yield of the whichever particular aldehyde product ratio is desired; 3) Aldehyde produced from hydroformylation is useful in the production of alcohol; 4) Bahrmann et al. discloses a hydroformylation process using seed oil with 100% conversion with the composition of the reaction product being 26% monoformyl by weight, 30% diformyl by weight and 47% by weight of trishydroformylation products, (see page 11, lines 1-6); and 5) Bahrmann et al. states that the hydroformylation products go through hydrogenation to give corresponding hydroxymethyl compounds. (see page 10, lines 14-18).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to take an aldehyde mixture derived from a hydroformylation reaction mixture using a metal-phosphorus ligand complex catalyst for targeted yield of the aldehyde mixture and then using hydrogenation to obtain the corresponding alcohol based on the yield of the aldehyde mixture with a reasonable expectation of success because the prior art suggests that a corresponding alcohol may be successfully produced from the aldehyde produced by hydroformylation.

Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

***Declaration Under 37 C.F.R. 1.132***

6. The declaration under 37 CFR 1.132 filed November 26, 2007 is insufficient to overcome the rejection of claims 18-34 based upon 35 U.S.C. 103 as set forth in the last Office Action because: even the results provided appear to compare the claimed invention with the closest prior art of the references set out above, the scope is not commensurate with the claims.

Applicant argues that the claimed composition with a diol to triol weight ratio greater than 5/1, as compared with comparative compositions having a diol/triol ratio less than 5/1, show unexpected results in the preparation of flexible polyurethane foams. Examiner notes that Applicant compared a soy-based monomer alcohol with a diol/triol weight ratio of 14.07/1 to a linseed-based monomer alcohol having a diol/triol weight ratio of 3.11/1. According to the test results shown in Table 3 of the declaration, polyols prepared from a monomer alcohol having a diol/triol weight ratio less than 5/1, produces polyurethane foams with tin splits. However, the weight ratio (3.11/1) of the Comparative Experiments CE 2, 3, 4 and 5 is closer to the claimed diol/triol weight ratio of 5/1. Because Applicant's Examples 3, 4 and 5 use diol/triol weight ratios further from claimed minimum weight ratio range, it cannot be determined from the results shown whether the claimed ratio of greater than 5/1 would not have the same negative effect in the production of the flexible polyurethane foams.

The declaration refer(s) only to a comparison ratios described in the above referenced application and not to the individual claims of the application. Thus, there is no showing that the objective evidence of nonobviousness is commensurate in scope with the claims. See MPEP § 716.


***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yate' K. Cutliff whose telephone number is (571) 272-9067. The examiner can normally be reached on M-TH 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne Eyler can be reached on (571) 272 - 0871. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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